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(54) Title: NOVEL MOLECULES EXPRESSED DURING MUSCLE DEVELOPMENT AND GENETIC SEQUENCES ENCODING THE SAME

Human Cal M S K Q P V S N V R A I Q A N I N I P N G A F R P G A G Q P P

Mouse Cal M S K Q P I S N V R A I Q A N I N I P M G A F R P G A G Q P P

Xenopus Cal M S K Q P A S N I R S I Q A N I N I P M G A F R P G A G Q P P

Human Csl RRKE CTPEVEEGVPPT-SD---EEKKPIPG
Mouse Csl RRKE STPETEEGAPTT-S---EEKKPIPG
xenopus Csl KRKEFSTEE-EQHVPTPESEEKSEEKKPIPG

Human Csl AKKLPGPAVNLSEIQNIKSELKYVPKAEQ.

Mouse Csl MKKFPGPVVNLSEIQNVKSELKFVPKGEQ.

Xenopus Csl AVKLPGPAFNLSET.

(57) Abstract

The present invention relates to novel molecules expressed during muscle development and to genetic sequences encoding same. More particularly, the present invention relates to novel molecules capable of, inter alia, modulating heart and skeletal muscle cell functional activity and to genetic sequences encoding same. Even more particularly, the present invention provides a novel molecule referred to herein as "Cs1" and to genetic sequences encoding same. The molecules of the present invention are useful, for example, in therapy, diagnosis and as a screening tool for therapeutic agents capable of modulating muscle cell functional activity.